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What is claimed:

1. A composition comprising a cell, tissue, or organ and glucosaminoglycan in the absence of serum.

- 2. The composition of claim 1 wherein the glucosaminoglycan is hyaluronan.
- 3. The composition of claim 1 wherein the composition is for preserving cells.
- 4. The composition of claim 3 wherein the cells are non-cultured.
- 5. The composition of claim 3 wherein the cells are cultured and preserved at a temperature of above freezing.
- 6. The composition of claim 3 wherein the cells are not unkeratinized epithelial cells.
- 7. The composition of claim 3 wherein the cells are non-corneal.
- 8. The composition of claim 3 wherein the cells are non-ovarian.
- 9. The composition of claim 3 wherein the cells are non-musculoskeletal.
- 10. The composition of claim 3 wherein the cells are in the absence of a non-cell penetrating cryoprotectant.
- 11. The composition of claim 3 wherein the cells are preserved at a temperature above freezing.
- 12. The composition of claim 3 wherein the cells are preserved at a temperature below freezing.
- 13. The composition of claim 1 wherein the cells are epithelial cells.
- 14. The composition of claim 13 wherein the cells are non-cultured.

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15. The composition of claim 13 wherein the cells are cultured and preserved at a temperature above freezing.

- 16. The composition of claim 13 wherein the cells are preserved in the absence of a non-cell penetrating cryoprotectant.
- 17. A method of making a cell-containing storage solution comprising utilizing a solution comprising a glucosaminoglycan in the absence of serum; and placing the cells in the solution.
- 18. The method of claim 17 wherein the glucosaminoglycan is hyaluronan.
- 19. A method of preserving cells comprising

utilizing a solution comprising glucosaminoglycan in the absence of serum; and storing the cells in the solution.

- 20. The method of claim 19 wherein the glucosaminoglycan is hyaluronan.
- 21. The method of claim 19 wherein the cells are preserved at a temperature above freezing.
- 22. The method of claim 19 wherein the cells are preserved at a temperature below freezing.
- 23. A method of treatment comprising

obtaining cells; storing the cells in a solution comprising glucosaminoglycan in the absence of serum; and using the cells in treatment.

24. The method of claim 23 wherein the glucosaminoglycan is hyaluronan.

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25. A kit comprising a storage solution comprising hyaluronan in the absence of serum and cells.

- 26. The kit of claim 25 wherein the cells are stored at a temperature above 0°C.
- 27. The kit of claim 25 wherein the cells are in sheets.
- 28. The kit of claim 25 wherein the cells are in solution.
- 29. The kit of claim 25 wherein the cells are a tissue.